

In the Claims:

We claim:

1. (currently amended) ~~Self-adhesive~~ A self-adhesive, flexible sealing tape comprising at least one flexible, self-adhesive core or at least one flexible, self-adhesive carrier layer provided with an envelope or two-sided coating ~~consisting of comprising~~ a second adhesive system, ~~characterized in that wherein~~ the envelope/coating ~~consists of comprises~~ an expanded pressure-sensitive adhesive tape, and that the material for the core/the carrier layer is selected from the group ~~consisting of comprising~~ thermoplastic rubbers on the basis of styrene-isoprene-styrene block copolymers, [[or]] styrene-butadiene-styrene block copolymers, copolymers of vinyl acetate, polyisobutylenes and acrylates which have been cross-linked by a process selected from the group consisting of either thermally or by means of and UV irradiation.

2. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, ~~characterised in that wherein~~ the material for the core/the carrier layer has a glass transition temperature (T_g) of below 0 °C.

3. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein ~~or 2, characterised in that~~ the pressure-sensitive adhesive tape is based on a pure dispersion acrylate.

4. (currently amended) ~~Sealing~~ The sealing tape according to claim 3, wherein ~~characterised in that~~ the pure dispersion acrylate is based on plasticizing monomers selected from the group consisting of 2-ethylhexyl acrylate, 1-butyl acrylate and n-butyl acrylate.

5. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, ~~characterised in that wherein~~ the pressure-sensitive adhesive tape ~~consists of comprises~~ an adhesive based on a material selected from the group consisting of vinyl isobutyl ether [[or]] and isobutene.

6. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein ~~any one of the preceding claims, characterised in that~~ the thickness of the core/the carrier layer is between 0.1 mm and 8 mm, ~~especially preferably between 1 mm and 5 mm~~.

7. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein ~~any one of the preceding claims, characterised in that~~ the width of the core/the carrier layer is between 1 mm and 10 mm.

8. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein
~~any one of the preceding claims, characterised in that~~ the thickness of the
 envelope/coating is between 0.2 and 1.5 mm, ~~especially preferably between 0.5 mm~~
 and 1 mm.

9. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein
~~any one of the preceding claims, characterised in that~~ the envelope/coating has a foam-
 like structure.

10. (currently amended) ~~Sealing~~ The sealing tape according to claim 1,
~~wherein any one of the preceding claims, characterised in that~~ the sealing tape is
 equipped with reinforcing elements which stabilise the sealing tape, ~~particularly~~ in the
 longitudinal direction.

11. (currently amended) ~~Sealing~~ The sealing tape according to claim 1,
~~wherein any one of the preceding claims, characterised in that~~ the reinforcing element
 is selected from the group consisting of threads, nonwovens or interlaid scrims,
 wovens, [[and]] knitted fabrics and [[or]] crocheted fabrics.

12. (currently amended) ~~Process~~ A process for the manufacture of a self-
 adhesive, flexible sealing tape comprising at least one flexible, self-adhesive core or at
 least one flexible, self-adhesive carrier layer provided with an envelope or two-sided
 coating ~~consisting of~~ including a second adhesive system, ~~characterised in that~~
comprising the steps of:

manufacturing the core/carrier layer and the envelope/coatings are
~~manufactured~~ in independent processes as web-like materials[[,]];

~~and that~~ subsequently advancing two pre-fabricated pressure-sensitive adhesive
 tapes, one per side, ~~are advanced~~ towards a web consisting of the elastic core
 material/carrier layer material[[,]]; and

applying pressure to combined said pre-fabricated tapes with said web are
~~combined therewith by application of pressure.~~

13. (currently amended) ~~Process~~ The process according to claim 12,
~~characterised in that~~ for the manufacture of the expanded pressure-sensitive adhesive
 tape further comprising the step of producing an aqueous dispersion of the pressure-
 sensitive adhesive ~~is produced which and contains~~ containing a filler ~~consisting of~~
comprising small, thermoplastic hollow plastic spheres ~~of plastic which are~~ filled with
 hydrocarbon gas, said hollow spheres expanding upon exposure to a temperature in the
 range between 70 °C and 140 °C[[,]]; ~~and that~~ processing the dispersion is processed

expanded.

14. (currently amended) Use of a sealing tape according ~~to any one of claims~~ claim 1 ~~[[to 11,]]~~ for adhesively bonding vapour barrier films or vapour retarder films, ~~especially for~~ by adhesively bonding said films to walls.
15. (new) The sealing tape according to claim 6, wherein the thickness of the core/the carrier layer is between 1 mm and 5 mm.
16. (new) The sealing tape according to claim 8, wherein the thickness of the envelope/coating is between 0.5 mm and 1 mm.